

grounds of geometrical truths, because they never hear any one deny, and attempt to disprove them.' Undoubtedly : and such teaching suffices on a subject like mathematics, where there is nothing at all to be said on the wrong side of the question. The peculiarity of the evidence of mathematical truths is, that all the argument is on one side. There are no objections, and no answers to objections. But on every subject on which difference of opinion is possible, the truth depends on a balance to be struck between two sets of conflicting reasons. Even in natural philosophy, there is always some other explanation possible of the same facts; some geocentric theory instead of heliocentric, some phlogiston instead of oxygen; and it has to be shown why that other theory cannot be the true one : and until this is shown, and until we know how it is shown, we do not understand the grounds of our opinion. But when we turn to subjects infinitely more complicated, to morals, religion, politics, social relations, and the business of life, three-fourths of the arguments for every disputed opinion consist in dispelling the appearances which favour some opinion different from it. The greatest orator, save one, of antiquity, has left it on record that he always studied his adversary's case with as great, if not with still greater, intensity than even his own. What Cicero practised as the means of forensic success, requires to be imitated

by all who study any subject in order to arrive at the truth. He who knows only his own side of the case, knows little of that. His reasons may be good, and no one may have been able to refute them. But if he is equally unable to refute the reasons on the opposite side; if he does not so much as know what they are, he has no ground for preferring either opinion. The rational position for him would be suspension of judgment, and unless he contents himself with that, he is either led by authority, or adopts, like the generality of the world, the side to which he feels most inclination. Nor is it enough that he should hear the arguments of adversaries from his own teachers, presented as they state them, and accompanied by what they offer as refutations. That is not the way to do justice to the arguments, or bring them into real contact with his own mind. He must be able to hear them from persons who actually believe them; who defend them in earnest, and do their very utmost for them. He must know them in their most plausible and persuasive form; he must feel the whole force of the difficulty which the true view of the subject has to encounter and dispose of; else he will never really possess himself of the portion of truth which meets and removes that difficulty. Ninety-nine in a hundred of what are called educated men are in this condition; even of those who can argue fluently for their opinions.